

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A composition useful as a vaccine, comprising:

(i) one or more vectors comprising a nucleic acid sequence encoding a tumor associated antigen or a fragment thereof or a nucleic acid sequence encoding a tumor endothelial marker 8 or a fragment thereof or a combination thereof; and

~~(i) a vector comprising nucleic acid sequence encoding a tumor-associated antigen or a fragment thereof;~~

~~(ii) a vector comprising nucleic acid sequence encoding a tumor endothelial marker 8 or a fragment thereof; and~~

[[~~(iii)~~]] (ii) a pharmaceutically acceptable carrier.

Claim 2 (original): The composition of claim 1, wherein said tumor-associated antigen is selected from the group consisting of HER2/neu, tyrosinase-related protein 1 (gp75), tyrosinase-related protein 2 (TRP-2) and prostate-specific membrane antigen.

Claim 3 (original): The composition of claim 1, wherein said nucleic acid sequence encoding a tumor endothelial marker 8 or a fragment thereof is derived from a mouse or a human.

Claim 4 (original): The composition of claim 3, wherein said mouse-derived tumor endothelial marker 8 has a nucleic acid sequence of SEQ ID No. 1.

Claim 5 (original): The composition of claim 4, wherein said nucleic acid sequence encodes a tumor endothelial marker 8 protein or a fragment thereof having SEQ ID No. 2 or SEQ ID NO. 3.

Claim 6 (original): The composition of claim 3, wherein said human-derived tumor endothelial marker 8 has a nucleic acid sequence of SEQ ID. No. 4.

Claim 7 (original): The composition of claim 6, wherein said nucleic acid sequence encodes a tumor endothelial marker 8 protein or a fragment thereof having SEQ ID No. 5 or SEQ ID No. 3.

Claim 8 (original): The composition of claim 3, wherein said tumor endothelial marker 8 has an amino acid sequence 80% homologous to SEQ ID No. 2, SEQ ID No. 3 or SEQ ID No. 5.

Claim 9 (original): The composition of claim 3, wherein said tumor endothelial marker 8 has an amino acid sequence 90% homologous to SEQ ID No.2, SEQ ID No. 3 or SEQ ID No. 5.

Claim 10 (original): The composition of claim 1, wherein said vector is a plasmid.

Claims 11-20 (canceled).

Claim 21 (original): A method of inducing antitumor immune responses in an individual, comprising the step of administering to said individual the composition of claim 1.

Claim 22 (original): The method of claim 21, wherein said composition is administered by a means selected from the group consisting of intramuscular injection, intradermal injection, subcutaneous injection, intranasal sprays and oral administration.

Claim 23 (currently amended): The method of claim 21, wherein ~~the two~~ said vectors of said composition are administered to said individual simultaneously or sequentially. -

Claim 24 (original): The method of claim 21, wherein the vectors of said composition are carried by delivery vehicles selected from the group consisting of liposomes and bacteria.

Claim 25 (original): The method of claim 21, wherein said individual has been diagnosed as having cancer or is at risk of developing cancer.

Claim 26 (original): A method of inducing antitumor immune responses in an individual, comprising the step of administering to said individual dendritic cells comprising nucleic acid or protein selected from the group consisting of the composition of claim 1 and proteins encoded by the vectors of said composition.

Claim 27 (original): The method of claim 26, wherein said individual has been diagnosed as having cancer or is at risk of developing cancer.

Claims 28-33 (canceled).

Claim 34 (currently amended): A composition useful as a vaccine, comprising:

a. a vector comprising a nucleic acid sequence encoding a tumor-associated antigen or a fragment thereof and a recombinant protein comprising tumor endothelial marker 8 or a fragment thereof or a vector comprising a nucleic acid sequence encoding a tumor endothelial marker 8 or a fragment thereof and a recombinant protein comprising a tumor associated antigen or a fragment thereof or a recombinant protein comprising tumor endothelial marker 8 or a fragment thereof and a recombinant protein comprising a tumor associated antigen or a fragment thereof; and

~~b. a recombinant protein comprising tumor endothelial marker 8 or a fragment thereof; and~~

[[c]] b. a pharmaceutically acceptable carrier.

Claim 35 (original): The composition of claim 34, wherein said tumor-associated antigen is selected from the group consisting of HER2/neu, tyrosinase-related protein 1 (gp75), tyrosinase-related protein 2 (TRP-2) and prostate-specific membrane antigen.

Claim 36 (original): The composition of claim 34, wherein said recombinant protein comprising tumor endothelial marker 8 or a fragment thereof is derived from a mouse or a human.

Claim 37 (original): The composition of claim 36, wherein said mouse-derived tumor endothelial marker 8 protein or fragment thereof has an amino acid sequence of SEQ ID No. 2 or SEQ ID No. 3.

Claim 38 (original): The composition of claim 37, wherein said amino acid is encoded by nucleic acid of SEQ ID No. 1.

Claim 39 (original): The composition of claim 36, wherein said human-derived endothelial marker 8 protein or a fragment thereof has an amino acid sequence of SEQ ID No. 5 or SEQ ID No. 3.

Claim 40 (original): The composition of claim 39, wherein said amino acid is encoded by nucleic acid of SEQ ID No. 4.

Claim 41 (original): The composition of claim 36, wherein said tumor endothelial marker 8 has an amino acid sequence 80% homologous to SEQ ID No. 2, SEQ ID No. 3 or SEQ ID No. 5.

Claim 42 (original): The composition of claim 36, wherein said tumor endothelial marker 8 has an amino acid sequence 90% homologous to SEQ ID No. 2, SEQ ID No. 3 or SEQ ID No. 5.

Claim 43 (original): The composition of claim 34, wherein said vector is a plasmid.

Claim 44 (original): A method of inducing antitumor immune responses in an individual, comprising the step of administering to said individual the composition of claim 34.

Claim 45 (original): The method of claim 44, wherein said composition is administered by a means selected from the group consisting of intramuscular injection, intradermal injection, subcutaneous injection, intranasal sprays and oral administration.

Claim 46 (currently amended): The method of claim 44, wherein said vectors of said composition and the recombinant proteins of said composition are administered to said individual simultaneously or sequentially.

Claim 47 (original): The method of claim 44, wherein the vector of said composition is carried in a delivery vehicle selected from the group consisting of liposomes and bacteria.

Claim 48 (original): The method of claim 44, wherein said individual is diagnosed as having cancer or is at risk of developing cancer.

Claims 49-76 (canceled).